COVER ESSAY

The decline of smoking in British portraiture

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Received 7 November 2003 Accepted 2 December 2003 **Objective:** To examine time trends in the portrayal of smoking in a national collection of portraiture and to compare this with the similar trends for television and film.

Methods: A compact disc produced by the National Portrait Gallery in London, UK, was systematically searched for artworks produced in the years 1950 to 1999. A "smoking portrayal" in an artwork was defined as having a cigarette, cigar or pipe in the mouth or hand of a named individual.

Results: Out of 1063 artworks included in the analysis, 53 portrayed smoking by identifiable individuals (5.0%). The rate of portrayal was highest in the 1950s (10%) and 1960s (11%) and then declined sharply thereafter (p value for trend < 0.00001). Smoking virtually disappeared from portraiture in the 1990s (at 0.6%). The median age of the smokers portrayed was significantly higher in the 1970 to 1999 period when compared to the 1950 to 1969 period.

Conclusions: The decline of smoking in this collection of portraiture is consistent with the decline in smoking in the UK over these decades, but contrasts with trends for increasing smoking portrayal described elsewhere for film and television.

he scale and impact of tobacco use is such a major public health problem that it is important to understand the social context of smoking promotion and maintenance. Studies have been done on tobacco portrayal and use in advertising, ¹² music videos, ³ magazines, ⁴ television, ⁵ and film. ⁶ There is also evidence that the tobacco imagery in some of these media have impacts on smoking perceptions and youth smoking initiation rates. ^{7–10}

There has been a very limited consideration of the portrayal of smoking in art—for example, for Norwegian art¹¹ and in Dutch genre art.¹² To explore the portrayal of smoking in art further, we examined the trends in the portrayal of smoking in portraits held by the National Portrait Gallery in London, UK. We then compared these trends with tobacco consumption in British society and with trends for smoking portrayals for television and film.

METHODS

A compact disc produced by the National Portrait Gallery in London has an interactive catalogue of the gallery's primary collection of 10 000 portraits. ¹³ The people portrayed in this collection are predominantly public figures and have nearly all lived in the UK. This disc based catalogue was systematically searched by using each year as a search term in the database so as to identify all the art works produced in each year for the years 1950 to 1999. Out of these art works, the following were included in the dataset for this study: photographs, paintings, drawings, and cartoons of named adults (that is, sculptures were excluded).

A "smoking portrayal" in an artwork was defined as the depiction of a cigarette, cigar or pipe in the mouth or hand of a named individual. Where the same individuals appeared in more than one portrait in a particular year, they were only included in the dataset once for that year. In these cases, where there were one or more "smoking portrayals" the first one with such a portrayal identified in the search was selected. The age of those portrayed as smokers was calculated on the basis of the year of the portrait minus the year of their birth.

The use of an alternative search strategy, based on searching for dates of birth back to 1870, identified one additional portrait containing smoking in the 1950–1999 period. Both searches were conducted by the first author.

Since the images of smoking were occasionally unclear, the "smoking portrayal" was only included in the dataset where both authors and another colleague independently classified the portrait as portraying smoking (at a probability exceeding 50%). Statistical tests were performed with Epi Info 2000 (Centers for Disease Control and Prevention).

RESULTS

A total of 1954 artworks were examined in the 1950 to 1999 period and 98 portrayed smoking by identifiable individuals (5.0%). When individuals with multiple portraits in the dataset were counted only once per year, there were 53 portraits that portrayed smoking out of a total of 1061 artworks (that is, also 5.0%).

The rate of portrayal of smoking was highest in the 1950s and 1960s and declined in subsequent decades (table 1). The overall downward trend in smoking portrayal was highly significant for all artworks (p < 0.00001) and was also significant when considering just photographs and drawings. Smoking virtually disappeared from this collection of portraiture in the 1990s (at under 1% of artworks). The median age of the individuals portrayed smoking was 49 years for men and 46.5 years for women. The median age of the smokers in the earlier period (1950–1969) was younger than in the later decades (1970–1999) (46 years versus 58 years respectively; p = 0.015).

For the whole time period, smoking portrayals were relatively higher in portraits of men than for women (odds ratio 2.8, 95% confidence interval 1.0 to 10.6). For the individuals who were portrayed smoking, the occupations were: writers (33%, n=16), painters (18%, n=9), other artists, including of the performing arts (20%, n=10), politicians (8%, n=4), and others (20%, n=10) (for example, business people and journalists). In contrast, there were no portrayals of smoking among: scientists, engineers, mathematicians, astronomers, inventors, and "physicians & surgeons".

Cigarettes were the dominant form of tobacco product (64% of portrayals (34/53)), followed by pipes (26%), and cigars (9%). Only 8% of smoking portrayals showed actual smoke (in two photographs and two drawings—4/53 portraits).

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	Photographs			Drawings			Paintings			Cartoons			All portraits		
Years	Smoking (n)	Total (n)	Smoking (n) Total (n) % smoking	Smoking (n)	Total (n)	(n) % smoking	Smoking (n)	Total (n)	Total (n) % smoking	Smoking (n)	Total (n)	Total (n) % smoking	Smoking (n)	Total (n)	% smoking
950-59	9	69	8.7	11	82	13.4	2	38	5.3	0	0	0.0	19	189	10.1
1960-69	17	112	15.2	4	46	8.7	0	24	0.0	2	24	8.3	23	206	11.2
970-79	2	35	5.7	_	39	2.6	-	19	5.3	0	0	0.0	4	93	4.3
68-086	က	102	2.9	-	49	2.0	_	62	1.6	0	0	0.0	5	215	2.3
66-066	0	278	0.0	0	22	0.0	2	58	3.4	0	2	0.0	2	358	9.0
620-66	28	965	4.7	17	238	7.1	9	201	3.0	2	26	7.7	53	1061	5.0
Value for															
rend (χ^2)		<0.00001			0.002			0.71			1			<0.00001	

DISCUSSION

The analysis found a sharp decline in the portrayal of smoking in a national collection of portraiture in the period 1950 to 1999. Possible reasons for this decline may include: (1) a reduction in smoking prevalence by people who were likely to have their portrait in this collection; (2) a change in the acceptability of including smoking portrayal in portraits of smokers (a decision by artists and/or their subjects); and (3) a change in the acceptability of portraiture showing smoking, by those who determine which artworks are selected for the collection of the National Portrait Gallery. The latter reason seems unlikely, although some institutions have been sensitive to issues of smoking portrayal (for example, regarding images of Roosevelt¹⁴ and an image of the artist Jackson Pollack on a US stamp¹⁵).

The decline in the social acceptability of smoking is a plausible influence on smoking portrayal in portraiture. Since the 1960s there has been increased public awareness in the UK of the hazards posed by smoking and most people now report being aware of the health risks associated with secondhand smoke exposure.16 There has been the growth of non-governmental organisations that promote smoke-free policies (such as Action on Smoking and Health-ASH) and many organisations have instituted smoke-free area policies. British politicians have also felt able to intensify various tobacco control measures over the decades (including restrictions on advertising in various settings, health warnings on cigarette packets, increases in tobacco taxation, and even television advertising campaigns¹⁷). Finally, smoking has become a marker of low occupational class, with smoking prevalence in the UK in 2001 being 33% among adults living in "routine or manual" households compared to 19% among those in the "managerial and professional" households.18

Comparison with actual smoking trends

As the portrayal of smoking in portraiture has declined, so has tobacco use and smoking prevalence in the UK in recent decades. Tobacco consumption per person appeared to peak in the UK around 1960 and has declined since.19 However, the peaks in consumption per adult actually vary substantially by sex and age group. For example, the peak cigarette consumption for men and women aged 45-49 years was in the periods 1946 to 1950 and 1976 to 1980 respectively.²⁰ Also, given that people likely to be in the portrait collection tend to be from the occupational groups associated with high social class, the trends for this class may be particularly relevant. In the late 1940s and early to mid 1950s, smoking was more common among the higher social classes in Britain.21 Then between 1958 and 1971, smoking among men in social class I declined from 54% to 37%. Steep declines in smoking prevalence were also seen for both professional men and professional women for the 1972 to 1988 period.21

Comparison with trends in film and television

We could not identify any trend data that related specifically to smoking portrayals in films or television programmes produced in the UK. Nevertheless, some trend data are available for US films and television programmes—which dominate the global market in the English speaking world.

For animated children's films, the largest study to date identified a significant reduction in the portrayal of tobacco use (for between 1937 and 2000).²² For other US films, studies covering the periods 1988 to 1997²³ and 1985 to 1995²⁴ reported no evidence for declines in tobacco portrayal. However, the study of popular US films which has covered the longest time period, has reported that the portrayal of tobacco declined from the 1960s to a low point in the 1980s and began to increase again in the 1990s.^{25 26} An updated analysis of this dataset has reported that tobacco use in year 2000 movies exceeded the level of those in the 1960s.²⁷

What this paper adds

There are some studies showing that the portrayal of smoking in film and television has increased over recent decades, but no studies have been done on portraiture.

There was a sharp decline in the portrayal of smoking in a national collection of British portraiture in the period 1950 to 1999. This trend is compatible with the actual decline in smoking by the British population. But this trend contrasts with trends for increasing smoking portrayal described for film and television.

A decline in tobacco use on US prime time television for both "situation comedies" and "dramas" has been reported for the period 1950 to 1982. However, a study done in 1984 suggested that the rate of tobacco portrayal was increasing again. Similarly, a study in 1993 reported a rise in tobacco use on US prime time television.

The decline of smoking in portraiture in this dataset is therefore consistent with the declining trend of smoking in children's animated films. It contrasts, however, with the evidence for recent rises in the rate of tobacco use in popular US films and television comedies and dramas. One possible reason for this difference is that portraiture is less likely to be influenced by tobacco companies than is the film and television industry.

The tobacco industry has used tobacco product placement, has placed favourable articles relating to product use by actors in national print media, and has provided free cigarettes to actors on a regular basis. While the tobacco industry claims to have ended the practice of product placement, one study found no change in the prevalence of tobacco brand appearance in films after the industry's voluntary ban on product placement.

Many other factors could also account for the differences between the trends for the selected portraits and for films and television. For example, a study involving interviews with film industry workers found that most attributed the rise in tobacco use in film to "an increase in independent films and the popularity of gritty images".³¹

Future research

Further trend and qualitative studies on the portrayal of smoking in various formats and in different media are needed to provide more context around the crucial public health issue of tobacco use. For instance, while there has been some discussion on *coverage* of smoking in the news, ^{32–34} except for two studies found, ^{35–36} little is know about the *visual depiction* of smoking in news coverage—print, television, and electronic web based. One potential outcome of such research is that with better information, tobacco control advocates would be more able to engage in constructive dialogue with the news, advertising, film, and television industries. Such dialogue could, for example, promote "a norm to include tobacco depiction only when the scene would suffer substantially without it".³¹

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NW designed the study, collected the data and did the statistical analysis. Both NW and GT wrote the paper. NW is the guarantor.

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REFERENCES

- Cummings KM, Morley CP, Horan JK, et al. Marketing to America's youth: evidence from corporate documents. *Tobacco Control* 2002;11(suppl I):iI5–17.
- Pollay RW. Targeting youth and concerned smokers: evidence from Canadian tobacco industry documents. *Tobacco Control* 2000;9:136–47.
 DuRant RH, Rome ES, Rich M, et al. Tobacco and alcohol use behaviors
- 3 DuRant RH, Rome ES, Rich M, et al. Tobacco and alcohol use behavior portrayed in music videos: a content analysis. Am J Public Health 1997;87:1131–5.
- 4 MacFadyen L, Amos A, Hastings G, et al. 'They look like my kind of people'perceptions of smoking images in youth magazines. Soc Sci Med 2003:56:491-9.
- 5 Hazan AR, Glantz SA. Current trends in tobacco use on prime-time fictional television. Am J Public Health 1995;85:116-7.
- 6 Mekemson C, Glantz SA. How the tobacco industry built its relationship with Hollywood. *Tobacco Control* 2002;11(suppl I):i81–91.
- Donovan RJ, Jancey J, Jones S. Tobacco point of sale advertising increases positive brand user imagery. *Tobacco Control* 2002;11:191–4.
 Gidwani PP, Sobol A, DeJong W, et al. Television viewing and initiation of
- Gidwani PP, Sobol A, DeJong W, et al. Television viewing and initiation of smoking among youth. Pediatrics 2002;110:505–8.
- 9 Sargent JD, Beach ML, Dalton MA, et al. Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. BMJ 2001;323:1394–7
- 10 Tickle JJ, Sargent JD, Dalton MA, et al. Favourite movie stars, their tobacco use in contemporary movies, and its association with adolescent smoking. Tobacco Control 2001;10:16–22.
- 11 Larsen IF. Smoking and art. History of smoking in Norway in paintings [abstract in English, article in Norwegian] Tidsskr Nor Laegeforen 1997;117:4418–21.
- 12 Harley D. The moral symbolism of tobacco in Dutch genre painting. Clio Med 1998 46:78–88.
- 13 National Portrait Gallery. Woodward portrait explorer on CD-ROM. London: National Portrait Gallery, 2001.
- 14 Caldwell MC, Titsworth KA. Changing FDR's image. Tobacco Control 1996;5:312–5.
- 15 Gostin LO. Public health law: power, duty, restraint. University of California Press, 2001.
- 16 Green E, Courage C, Rushton L. Reducing domestic exposure to environmental tobacco smoke: a review of attitudes and behaviours. J R Soc Health 2003:123:46-51.
- 17 McVey D, Stapleton J. Can anti-smoking television advertising affect smoking behaviour? Controlled trial of the Health Education Authority for England's anti-smoking TV campaign. *Tobacco Control* 2000;9:273–82.
- 18 Office for National Statistics. Living in Britain-results from the 2001 General Household Survey. London: Office for National Statistics, 2002. http://www.statistics.gov.uk/lib2001/Section3477.html (Accessed 14 June 2003)
- 19 Godfrey C, Maynard A. Economic aspects of tobacco use and taxation policy. BMJ 1988;297:339–43.
- 20 Lee PN, Fry JS, Forey BA. Trends in lung cancer, chronic obstructive lung disease, and emphysema death rates for England and Wales 1941–85 and their relation to trends in cigarette smoking. *Thorax* 1990;45:657–65.
- 21 Stellman SD, Resnicow K. Tobacco smoking, cancer and social class. IARC Sci Publ 1997:138:229–50
- 22 Thompson KM, Yokota F. Depiction of alcohol, tobacco, and other substances in G-rated animated feature films. *Pediatrics* 2001;107:1369–74.
- 23 Dalton MA, Tickle JJ, Sargent JD, et al. The incidence and context of tobacco use in popular movies from 1988 to 1997. Prev Med 2002;34:516–23.
- 24 Everett SA, Schnuth RL, Tribble JL. Tobacco and alcohol use in top-grossing American films. J Community Health 1998;23:317-24.
- 25 Hazan AR, Lipton HL, Glantz SA. Popular films do not reflect current tobacco use. Am J Public Health 1994;84:998–1000.
- 26 Stockwell TF, Glantz SA. Tobacco use is increasing in popular films. Tobacco Control 1997;6:282-4.
- 27 Kacirk K, Glantz SA. Smoking in movies in 2000 exceeded rates in the 1960s. Tobacco Control 2001;10:397–8.
- 28 Breed W, De Foe JR. Drinking and smoking on television, 1950–1982. J Public Health Policy 1984;5:257–70.
- 29 Cruz J, Wallack L. Trends in tobacco use on television. Am J Public Health 1986;76:698–9.
- Sargent JD, Tickle JJ, Beach ML, et al. Brand appearances in contemporary cinema films and contribution to global marketing of cigarettes. Lancet 2001:357:29–32.
- 31 Shields DL, Carol J, Balbach ED, et al. Hollywood on tobacco: how the entertainment industry understands tobacco portrayal. *Tobacco Control* 1999:8:378–86.
- 32 Chapman S. The news on smoking: newspaper coverage of smoking and health in Australia, 1987–88. Am J Public Health 1989;79:1419–21.
- 33 Pierce JP, Gilpin EA. News media coverage of smoking and health is associated with changes in population rates of smoking cessation but not initiation. *Tobacco Control* 2001;10:145–53.
- 34 Wakefield M, Flay B, Nichter M, et al. Role of media in influencing trajectories of youth smoking. Addiction 2003;98(suppl 1):79–103.
- 35 Chapman S, Jones Q, Bauman A, et al. Incidental depiction of cigarettes and smoking in Australian magazines, 1990–1993. Aust J Public Health 1995;19:313–5.
- 36 Ribisl KM. The potential of the internet as a medium to encourage and discourage youth tobacco use. Tobacco Control 2003;12(suppl I):i48–59.